REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated November 16, 2005. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 1, 6, 8-9, and 12-15 are under consideration in this application. Claims 1 and 13 are being amended, as set forth above, in order to more particularly define and distinctly claim Applicants' invention.

The claims are being amended to correct formal errors and/or to better disclose or describe the features of the present invention as claimed. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Formality Rejection

Claim 13 was objected to due to informalities. As indicated, claim 13 is being amended as required by the Examiner. Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

Prior Art Rejections

Claims 1, 6, 9 and 12-15 were rejected under 35 U.S.C. § 102(b) on the grounds of being anticipated by Suzuki et al. (US 2002/0008834), and further in view of claims 13-15 by Sumida (JP 2000-75281). Claim 8 was rejected under 35 U.S.C. § 103(a) on the grounds of being unpatentable over Suzuki in view of Sumida. The prior art references of Yanagawa et al. (US 2003/0076471), Yanagawa (JP 2001-305561), and Suzuki (JP 11-142863) were cited as being pertinent to the present application. The above rejections have been carefully considered, but are most respectfully traversed.

The liquid crystal display device according to the invention (page 26, line 26 ~ page 29, line 17; Figs. 7-8), as now recited in claim 13, comprises: a first substrate ***100 B*** including a black mask ***3*** and color filters ***2***; a liquid crystal layer ***9***; a second substrate ***100A*** disposed opposite to the first substrate ***100B*** across the liquid crystal layer ***9***; first

signal lines ***102***, ***104*** formed on the second substrate ***100A***; second signal lines ***103*** intersecting the first signal lines ***102***, ***104*** with an insulating film provided therebetween; a plurality of pixel regions each formed as being surrounded by respective adjacent first signal lines ***102***, ***104*** and second signal lines ***103***, and having a pixel electrode; a base pattern ***11*** (e.g., Fig. 8; P. 28, last paragraph) selectively formed between pixel electrodes of adjacent pixel regions; a plurality of first spacers ***1b*** formed above a main surface of the first substrate ***100 B*** and arranged above a first part where is between selected ones of said pixel electrodes of adjacent pixel regions and overlaps with the base pattern ***11*** in a plan view; and a plurality of second spacers ***1c*** formed on the main surface of the first substrate ***100 B*** and arranged above a second part where is between other ones of said pixel electrodes of adjacent pixel regions and does not overlap with the base pattern ***11*** in the plan view. Each of the second spacers ***1c*** is ordinarily spaced from a stacked structure formed on the second substrate ***100A*** to accommodate the liquid crystal layer ***9*** therebetween, and each of the first spacers ***1b*** is formed above the base pattern 11 and ordinarily contacts directly the stacked structure formed on the second substrate ***100A*** (p. 29, 1st paragraph; Fig. 8). The first part includes the base pattern 11, the second part excludes the base pattern 11, and the first part is disposed opposite to the second part across a respective pixel region in the plan view.

The invention recited in claim 1 is directed to a liquid crystal display device (page 26, line 26 ~ page 29, line 17; Figs. 7-8) including the main elements of claim 13 and more details. The first substrate 100 B has a black mask 3 and color filters 2 arranged in an aperture of the black mask 3. The second substrate 100A is stuck to the first substrate 100B by a sealing material applied to peripheries of a main surface of the first substrate 100B facing the liquid crystal layer 9 and of a main surface of the second substrate 100A facing the liquid crystal layer 9. The stacked structure is formed on the main surface of the second substrate 100A by stacking in order first signal lines 102, 104, an insulating film covering the first signal lines 102, 104, and second signal lines 103 each overlappingly intersecting the first signal lines 102, 104 over the insulating film therebetween. Each of the second spacers 1c is ordinarily spaced from the stacked structure formed on the second substrate 100A to accommodate the liquid crystal layer 9 therebetween, and each of the first spacers 1b ordinarily contacts directly with the stacked structure formed on the second substrate 100A. Portions of the stacked structure contacting with the first spacers 1b are thicker than other portions of the stacked

structure corresponding to the second spacers 1c with the liquid crystal layer 9 interposed therebetween. A distance between the stacked structure on the second substrate 100A and each of the first spacers 1b on the first substrate 100B is longer than a distance between the stacked structure and each of the second spacers 1c on the first substrate 100B (Fig. 8).

The invention applies two kinds of spacers denoted by the reference numerals ***1b*** (formed above the base pattern) and ***1c*** (formed directly on the main surface) of the first substrate ***100B***, and arranged corresponding to a stacked structure formed on the second substrate ***100A***. The invention does not internally/deliberately apply "any external force" to press the first and second spacers ***1b, 1c*** against "areas between adjacent pixel regions on the second substrate" in the ordinary situation. Rather, the invention tried to cope with "an external force" accidentally/undesirably applied to the liquid crystal display device (p. 26, line 26 – p. 28, line 10; p. 3, line 18 – p. 4, line 16).

None of the cited prior art references teaches or suggests such "a base pattern *11* electively formed between pixel electrodes of adjacent pixel regions" or "a plurality of first spacers *1b* **formed** above a main surface of the first substrate *100 B* and arranged above a first part where is between selected ones of said pixel electrodes of adjacent pixel regions and overlaps with the base pattern *11* in a plan view; and a plurality of second spacers *1c* **formed** on the main surface of the first substrate *100 B* and arranged above a second part where is between other ones of said pixel electrodes of adjacent pixel regions and does not overlap with the base pattern *11* in the plan view" as recited in claims 1 and 13.

The cited prior art references neither teach nor suggest (1) that "the first part includes the base pattern 11, the second part excludes the base pattern 11, and the first part is disposed opposite to the second part across a respective pixel region in the plan view (claim 1)" or (2) that "the first part includes the base pattern 11, the second part excludes the base pattern 11, and the first part is disposed opposite to the second part across a respective pixel region in the plan view (claim 13)".

In contrast, Suzuki's divinylbenzene type spacers 30, 31 ([0058]) are freely moveable in the panel (*"they are freely movable in the panel when a external force is applied to the panel. Thus, liquid crystal molecules around spacers will not be subjected to the anomalous orientation which causes the leakage of light* ([0066])," rather than being formed on (i.e., fixed positions) the main surfaces of the first substrate as the invention

Only when an external force is applied to the panel, Suzuki's spacers 31 located under the light shielding layer 20 are held in a compressed and deformed state ([0066]), while the spacers are still freely moveable. Therefore, Suzuki does not provide any first spacers ***1b*** formed on the first substrate ***100B*** and ordinarily (i.e., without external force applied thereon) contacting directly the stacked structure formed on the second substrate ***100A.***

Moreover, Suzuki's spacers 30 are located in the color layer in the pixel region and above a gate electrode 10 and/or a common electrode 11(Fig. 2B), rather than "between pixel electrodes of adjacent pixel regions," i.e., outside any pixel region as those of the invention.

Further more, Suzuki does not describe any base pattern which is only included in the first part, but not in the second parts. Suzuki's light shielding film 20 ([0062]) is not a base pattern just for adjusting the heights of the spacers additional to the black mask 3 (Fig. 8).

Sumida does not compensate for Suzuki's deficiencies. Sumida's first spacers 7 are sprinkled in the penal ([0005]), rather than being formed on (i.e., fixed positions) the main surfaces of the first substrate as the invention

Sumida's second spacer (under region 32) is located in the pixel region 82, rather than "between pixel electrodes of adjacent pixel regions," i.e., outside any pixel region as those of the invention.

In addition, the alleged base pattern 2 is a protection-from-light layer, which is equivalent to the black mask 3 of the invention, rather than any base pattern 11 just for adjusting the heights of the spacers additional to the black mask 3 (Fig. 8). As to a TFT element region 81 of Sumida, it is only a TFT element, rather than any base pattern 11 just for adjusting the heights of the spacers.

In the present invention, the structure of the first part and second part are different in according to the first spacer and the second spacer. There is a no reference cite teaching the pixel region being not uniform such that (1) "the first part includes the base pattern 11, the second part excludes the base pattern 11, and the first part is disposed opposite to the second part across a respective pixel region in the plan view (claim 1)," and (2) that "the first part includes the base pattern 11, the second part excludes the base pattern 11, and the

first part is disposed opposite to the second part across a respective pixel region in the plan view (claim 13)".

Applicants contend that neither Suzuki, Sumida, nor their combination teaches or suggests each and every feature of the present invention as recited in independent claims 1 and 13. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344

Juan Carlos A. Marquez
Registration Number 34,072

REED SMITH LLP
3110 Fairview Park Drive
Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

March 30, 2006

SPF/JCM/JT